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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,807	01/26/2004	Alan G. Yates	GLT-002	9758
3897	7590	03/07/2005	EXAMINER	
SCHNECK & SCHNECK P.O. BOX 2-E SAN JOSE, CA 95109-0005			TANG, MINH NHUT	
			ART UNIT	PAPER NUMBER
			2829	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,807

Applicant(s)

YATES, ALAN G.

Examiner

Minh N. Tang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 and 5-8 is/are allowed.
- 6) ☒ Claim(s) 10-14 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 4,9 and 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/19/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on May 19, 2004 is considered by the examiner.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "shim plates within said device such that said pressure plate is offset by a height of said shim plates" (claims 6 and 19), "stop pins positioned to restrict the rotation of the handle" (claims 7 and 20) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "40", "22", "26", "52", "18" have been used to designate both "socket body" and "socket base", "bearing housing" and "lid", "lid assembly" and "lid hinge mechanism", "inclined surface" and "cam plate", "handle" and "cap", respectively (see Applicant's specification pages 7-9). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: reference numbers "38", "97", "21", "9", "7", "33", and "51" (see Applicant's specification pages 7-8). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the

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immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: reference numbers "11", and "45" (Fig. 1), reference number "9" (Fig. 2), reference numbers "46", and "48" (Fig. 3), reference numbers "30a", and "30b" (Fig. 6), and reference number "30b" (Fig. 7). Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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6. The drawings are objected to because reference numbers "16" and "50" are located at different locations (i.e., different parts with same number). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet ***within the range of 50 to 150 words***. It is important that ***the abstract not exceed 150 words in length*** since the space provided for the abstract on the computer tape used by the printer is limited. ***The form and legal phraseology often used in patent claims, such as "comprising", "means" and "said," should be avoided.*** The abstract should describe the disclosure sufficiently to

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assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

8. The abstract of the disclosure is objected to because it exceeds 150 words and used the word "means". Correction is required.

9. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

10. The disclosure is objected to because of the following informalities: "Figs. 1-9" (page 9, line 35) should be -- Figs. 1-7 --.

Appropriate correction is required.

11. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

12. Claims 4, 9-14, 16-17, and 20 (claim 15 as well) are objected to because of the following informalities:

a/ in claim 4, line 1, "grooves" should be -- said grooves --.

b/ in claim 9, it is not understood what is meant by "a means for allowing incremental lowering of said pressure plate". Is that "means" described in the specification? If that "means" is corresponded to the inclined surfaces, then the claim is duplicated.

c/ in claim 10, line 11, "a test device" should be -- said integrated circuit --.

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d/ in claim 11, line 1, "said means" should be -- said rotating means --.

e/ in claims 12 and 14, all in line 3, the phrase "may be" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention, therefore "may be" should be -- is --.

f/ in claim 13, "a test device" (lines 11-12), and "said device" (line 12) should be -- said integrated circuit --, and -- said socket --, respectively.

g/ claim 16 recites the limitation "said circumferential inclined surface", "the bearing assemblies" in lines 1-2 and 3. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, "inclined surfaces" (claim 15, line 2) is interpreted as -- circumferential inclined surfaces --; claim 16 is treated as dependent upon claim 15, and "the bearing assemblies" (claim 16, line 3) is interpreted as -- the bearing assemblies of said lid --.

h/ in claim 17, since "said continuous circuit" refers to "a continuous circuit of inclined surface" recited in claim 15 therefore, claim 17 should depend on claim 15.

i/ in claim 20, line 2, there is insufficient antecedent basis for the limitation "the handle" in the claim. For examination purposes, "the handle" is interpreted as -- said rotating means --.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 10-14 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Kiffe (U.S.P. 6,353,329).

As to claim 10, Kiffe discloses, in Fig. 1, a device (8) for testing integrated circuits (26) comprising a base (10); a socket (i.e., central opening 24 with electrical contact 25) within said base (10) for receiving a plurality of terminals (leads or pads) from an integrated circuit (26); a lid (12); a hinge (14) joining said lid (12) to said base (10); a locking mechanism (16) allowing locking of said lid (12) to said base (10); a pressure plate (18) retained within said lid (12); a rotating means (20) for lowering said pressure plate (18) from said lid (12) to said socket when said integrated circuit (16) is placed within said socket.

As to claim 11, Kiffe discloses in Fig. 1, said rotating means (20) for lowering said pressure plate (18) includes a means (i.e., cylindrical rollers 66 associated with inclined ramps or cammed surfaces 56 formed on the pressure plate 18) for incrementally lowering said pressure plate (18).

As to claims 12 and 14, Kiffe discloses in column 6, lines 3-15, said pressure plate (18) include an open central area (53) through which the integrated circuit (26) is viewed (i.e., accessing to the surface of the integrated circuit 26).

As to claim 13, Kiffe discloses, in Fig. 1, a device (8) for testing integrated circuits (26) comprising a base (10); a socket (i.e., central opening 24 with electrical contact 25) within said base (10) for contacting a plurality of terminals (leads or pads) from an integrated circuit (26); a lid (12); a hinge (14) joining said lid (12) to said base (10); a

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locking mechanism (16) allowing locking of said lid (12) to said base (10); a pressure plate (18) retained within said lid (12); a rotating means (20) that incrementally lowers said pressure plate (18) from said lid (12) to said socket when said integrated circuit (16) is placed within said socket; a plurality of open channels (52) positioned on said pressure plate (18) to view (i.e., accessing to the surface of the integrated circuit 26) the integrated circuit (26).

As to claim 18, Kiffe discloses in Fig. 1, a thrust bearing assembly (66) between the pressure plate (18) and the rotating means (20).

As to claim 19, Kiffe discloses in Fig. 1, shim plates (22) within said device (8) such that said pressure plate (18) is offset by a height of said shim plates (22).

As to claim 20, Kiffe discloses in Fig. 1, stop pins (6) positioned to restrict the rotation (see Fig. 7) of said rotating means (20).

Allowable Subject Matter

15. Claims 1-9 are allowed over the art of record. It is noted that claims 4 and 9 should be amended to overcome the objection set forth above.

16. Claims 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

It is noted that claims 16 and 17 are treated as dependent upon claim 15.

17. The following is a statement of reasons for the indication of allowable subject matter:

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Claims 1-9 recite, inter alia, a device for testing integrated circuits comprising a number of fixed bearing assemblies on the lid assembly, a cam plate having a plurality of circumferential inclined surfaces, a rotatable handle on the top of the lid assembly for rotating the inclined surfaces on the cam plate relative to the bearing assemblies, whereby the inclined surface of the cam plate rides on the bearing assemblies thereby causing the cam plate to displace and thereby causing the pressure plate to move the integrated circuit into the socket body.

Claims 15-17 recite, inter alia, said rotating means includes a continuous circuit of circumferential inclined surfaces.

The art of record does not disclose the above limitations, nor would it be obvious to modify the art of record so as to include the above limitations.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Barabi et al.	6,354,859	Cover Assembly For An IC Socket.
Kunzel	5,997,316	Slide-Lock Test Socket Assembly.
Kehley et al.	5,919,050	Method And Apparatus For Separable Interconnecting Electronic Components.
Chapin et al.	5,766,022	Electrical Assembly.
Hooley	5,640,303	Interconnection Apparatus For Semiconductor/Integrated Circuit Devices.
Morton	4,683,423	Leadless Chip Test Socket.

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Zachry 4,554,505 Test Socket For A Leadless Chip Carrier.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh N. Tang whose telephone number is (571) 272-1971. The examiner can normally be reached on M-F (7:00-3:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramirez can be reached on (571) 272-2034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MINH NHUT TANG
PRIMARY EXAMINER

02/25/05